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(71) Applicant (for all designated States except US): FREESCALE SEMICONDUCTOR, INC. [US/US]; 6501 William Cannon Drive, Austin, TX 78735 (US).

(72) Inventors; and  
(75) Inventors/Applicants (for US only): RENAUD, Philippe [FR/FR]; 21, rue de Chenonceau, F-31170 Tournefeuille (FR). RAMPRASAD, Ramamurthy [IN/FR]; 134, avenue de General Eisenhower, BP 72329, F-31023 Toulouse Cedex 1 (FR).

(74) Agent: WHARMBY, Martin, A.; Impetus IP Ltd, Grove House, Lutyens Close, Chineham Court, Basingstoke, Hampshire RG24 8AG (GB).

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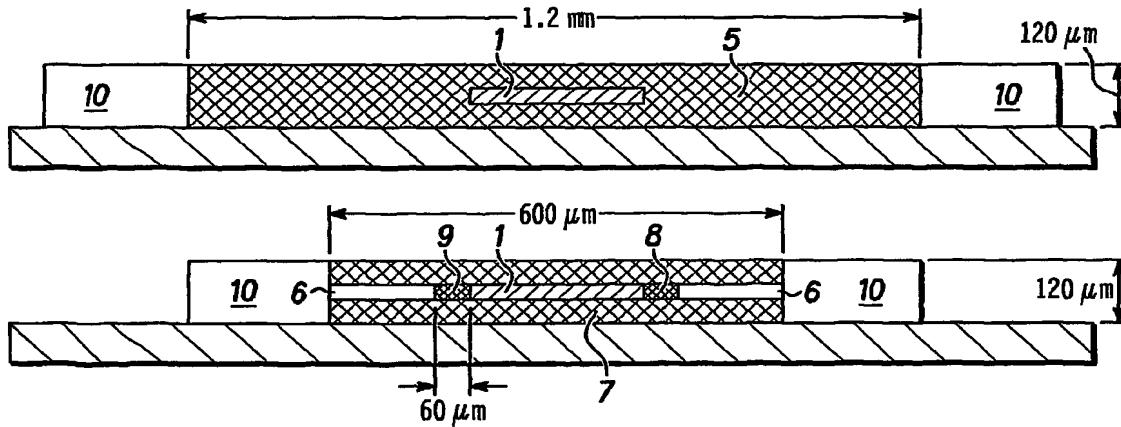
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(54) Title: HIGH FREQUENCY THIN FILM ELECTRICAL CIRCUIT ELEMENT



(57) Abstract: An electrical inductor circuit element comprising an elongate electrical conductor (1) coupled magnetically with thin layers of magnetic material (6, 7, 11, 12) extending along at least a part of the conductor above and below the conductor. The aspect ratio of the thickness of each of the layers (6, 7, 11, 12) of magnetic material to its lateral dimensions is between 0.001 and 0.5 and is preferably between 0.01 and 0.1. This range of aspect ratio has a high ferromagnetic resonance frequency. The inductor preferably includes magnetic interconnections (13, 14) extending beside the conductor (1) and interconnecting the layers of magnetic material (6, 7, 11, 12) at positions where magnetic flux generated by electrical current flowing along the conductor is transverse to the layers.

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